

Module 1 Mid-Module Review

Name _____

Section 1:1:1 Problem Solving

1) Janet noticed that the Surprise Lilies in her mother's garden didn't bloom every year. They bloomed in 1999, 2002, and 2005. When is the next year that these lilies will bloom again? Explain how you found your answer.

Section 1:1:2 Rates and Unit Rates

Name the units **AND** then write as a unit rate.

2) a. \$14.50 for 9 pizzas

b. 308 students in 3 houses

Copy and complete each equation.

3) a. 80 miles/hour = _____ miles/min

b. \$15/day = _____/week

Section 1:2:1 Make and use stem-and-leaf plots.

Quiz scores of Mrs. Koenig's 4th hour math class.: 86, 92, 89, 90, 77, 90, 93, 74, 81, 95, 70, 67, 88, 82, 94, 94, 91, and 85.

4) a. Use the data to create a stem-and-leaf plot.

b. Use the stem-and-leaf plot to find the following.

mean =

median =

mode =

5) Compare the stem-and-leaf plot you made to the stem-and-leaf plot below. What do the shapes of the stem-and-leaf plots tell you about the quiz scores in the two classrooms?

Quiz Scores of Mrs. Bachofen's 4th hour math class

| | |
|---|-----------------|
| 6 | 8 |
| 7 | 5 5 7 7 |
| 8 | 0 3 3 5 5 5 7 8 |
| 9 | 0 2 4 6 8 |

| | |
|---|------|
| 6 | 8=68 |
|---|------|

Comparison:

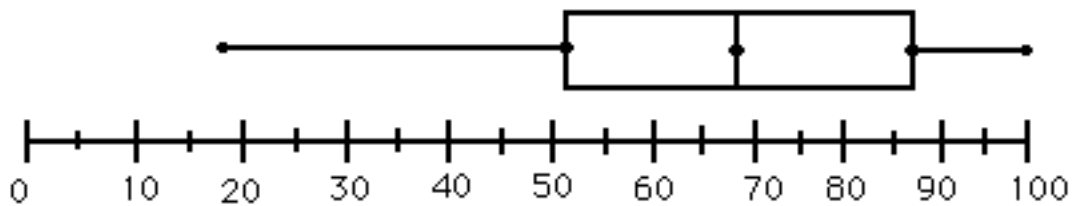
Section 1: 2: 2 Box and Whisker Plots

6) Draw a Box and Whisker Plot for the speed data (in miles per hour) of cars traveling on Forest Hill Avenue.

15 22 50 30 22 32 27 36 26 29 31

7) The box-and-whisker plot below shows the weight of dogs at the Doggie Daycare . Use it to answer the questions below.

Weight (in pounds) of Dogs at Doggie Daycare



a) What is the median?

b) What is the lower extreme?

c) What is the upper quartile?

d) What is the range of the weights?

e) What is the weight of the lightest dog?

f) What percent of dogs weigh over 87 pounds?

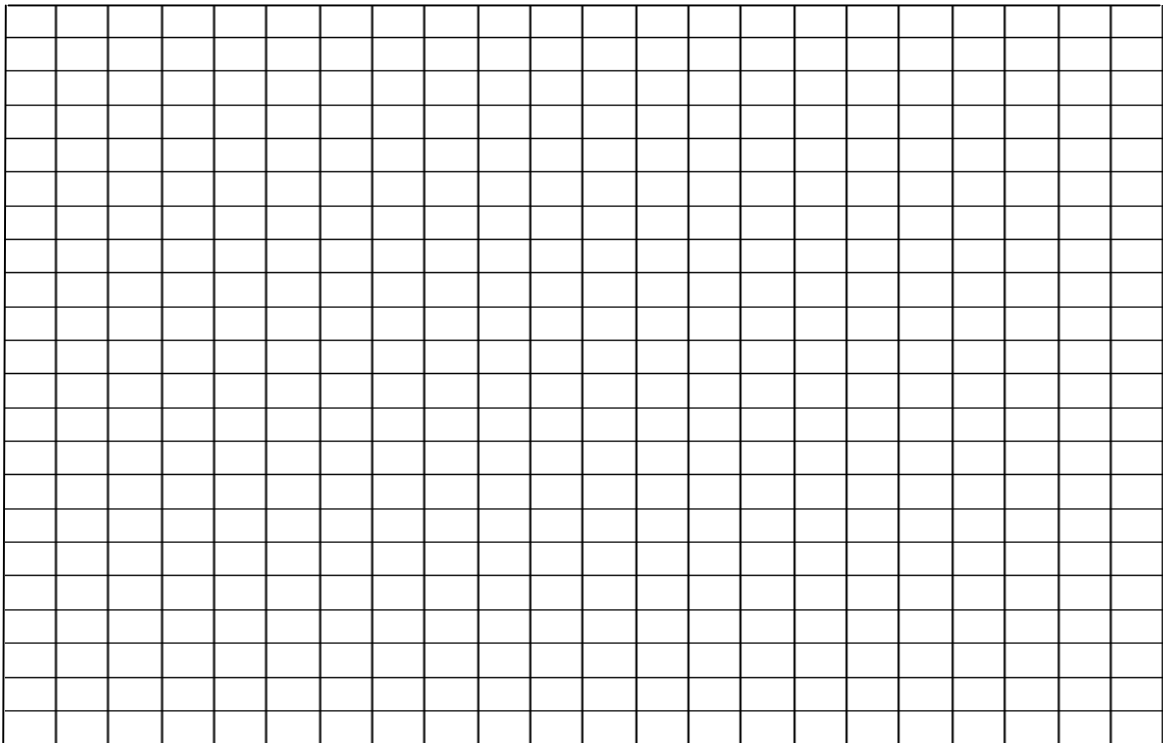
g) Half of the dogs are under what weight?

Section 1:3:1 Scatter Plot and Fitted Line

The data below represents how many CDs are sold in a time period in hours. Use the data for questions 6-8.

| | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Hours of Operation | 54 | 48 | 60 | 65 | 40 | 60 | 48 | 56 |
| # of CDs Sold | 710 | 530 | 850 | 940 | 520 | 740 | 630 | 750 |

8) Make a scatter plot using the data. Put hours of operation on the horizontal axis.



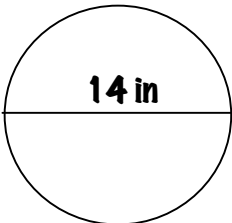
9) If it makes sense to do so, draw a fitted line (line of best fit) on your scatter plot.

10) Use the data to predict how many CDs might be sold when hours of operation are 68 hours.

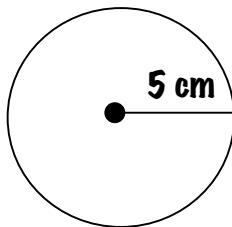
Section 1:4:1 Find Circumference & Write and Evaluate Expressions

Find circumference for each circle.

11)



12)



Evaluate each expression for the given variables.

13) πr^2 when $r=7.5$

14) $\frac{4m}{2}$ when $m=12$

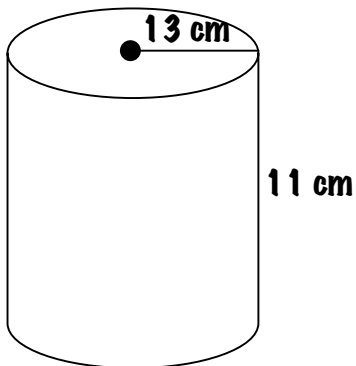
15) $c - 15$ when $c=63$

16) $3(n+12)$ when $n=7$

Section 1:4:2 Find the volume of rectangular prisms and cylinders

Calculate the volume. **SHOW YOUR WORK** and **REMEMBER YOUR LABEL!**

17)



18)

